

What is claimed is:

1. A composite comprising:
an outer layer comprising a first polymeric material;
a core layer circumscribed by the outer layer and
comprising a second polymeric material; and
5 an inner layer circumscribed by the core layer and
comprising a third polymeric material, wherein the inner
layer defines a hollow space.
2. The composite of claim 1 wherein at least two of
the first, second and third polymeric materials have
different chemical compositions.
3. The composite of claim 1 wherein at least one of
the first, second and third polymeric materials is a
thermal plastic polymeric material.
4. The composite of claim 1 wherein each of the
first, second and third polymeric materials is a thermal
plastic polymeric material.
5. The composite of claim 1 in the form of a member
having a length, and the hollow space extends along
substantially the entire length of the member.
6. The composite of claim 5 wherein the member has
a substantially rectangular cross-section perpendicular to
the length.
7. The composite of claim 1 in the form of a member
having a length, the core layer is circumscribed by the
outer layer along substantially the entire length of the
member and the inner layer is circumscribed by the core

layer along substantially the entire length of the member.

8. The composite of claim 1 wherein the first polymeric material is weatherable.

9. The composite of claim 1 wherein the first polymeric material is selected from the group consisting of polyvinylchloride, acrylonitrile/styrene/acrylic polymeric materials and combinations thereof.

10. The composite of claim 1 wherein the core layer includes an effective of a filler.

11. The composite of claim 1 wherein the core layer includes a wood component in an amount effective as a filler.

12. The composite of claim 1 wherein the second polymeric material is a thermal plastic polymeric foam and the core layer includes a wood component in an amount effective as a filler.

13. The composite of claim 1 wherein the second polymeric material is a solid thermal plastic polymeric material and the core layer includes a wood component in an amount effective as a filler.

14. The composite of claim 1 wherein the core layer includes a wood component in an amount effective as a filler, and the second polymeric material is selected from the group consisting of polyvinylchloride, acrylonitrile/styrene/acrylic polymeric materials, acrylonitrile/butadiene/styrene polymeric materials and combinations thereof.

15. The composite of claim 1 wherein the third polymeric material is selected from the group consisting of polyvinylchloride, acrylonitrile/butadiene/styrene polymeric materials and combinations thereof.

16. The composite of claim 1 in the form of a fence component or a decking component.

17. The composite of claim 1 is produced using a single, coextrusion process.

18. A composite component comprising
a weatherable outer layer comprising a first polymeric material;

5 a core layer circumscribed by the outer layer and comprising a wood-filled thermal plastic second polymeric material; and

10 an inner layer circumscribed by the core layer and comprising a thermal plastic third polymeric material, wherein the inner layer defines a hollow space, the composite component being a fence component or a decking component.

19. The component of claim 18 wherein at least two of the first, second and third polymeric materials have different chemical compositions.

20. The component of claim 18 in the form of a member having a length, and the hollow space extends along substantially the entire length of the member.

21. The component of claim 18 in the form of a member having a length, the core layer is circumscribed by the outer layer along substantially the entire length of the member and the inner layer is circumscribed by the core

layer along substantially the entire length of the member.

22. The component of claim 18 wherein the second polymeric material is a foam.

23. The component of claim 18 in the form of a fence post.

24. The component of claim 18 is the form of a fence rail.

25. The component of claim 18 in the form of a decking plank.

26. A fencing system comprising:

a plurality of fence posts; and

5 a plurality of fence rails fastened to the plurality of fence posts so as to form a fence, wherein each of said fence posts and fence rails comprises

a weatherable outer layer comprising a first polymeric material;

10 a core layer circumscribed by the outer layer and comprising a wood-filled thermal plastic second polymeric material; and

an inner layer circumscribed by the core layer and comprising a thermal plastic third polymeric material, wherein the inner layer defines a hollow space.

27. The system of claim 26 wherein at least two of the first, second and third polymeric materials have different chemical compositions.

28. The system of claim 26 wherein each of the fence posts and fence rails has a length, and the hollow space extends along substantially the entire length.

29. The system of claim 28 wherein at least one of the plurality of fence posts and the plurality of fence rails have substantially rectangular cross-sections perpendicular to the lengths.

30. The system of claim 26 wherein each of the fence posts and fence rails has a length, the core layer is circumscribed by the outer layer along substantially the entire length of the member and the inner layer is
5 circumscribed by the core layer along substantially the entire length.

31. The system of claim 26 wherein the second polymeric material is a foam.

32. A method for producing a substantially hollow composite having a weatherable outer layer, a wood-filled polymeric core layer and a thermal plastic inner layer, wherein the inner layer defines a hollow space, the method
5 comprising the steps of:

providing, in extrudable form, (1) a first composition comprising a weatherable polymeric material, (2) a second composition comprising a wood-filled thermal plastic polymeric material, and (3) a
10 third composition comprising a thermal plastic polymeric material;

introducing each of the compositions into a different extrusion pathway of a single extruder/feedblock/pipehead assembly;

15 extruding the compositions to form a radially layered, substantially circular, cylindrical form;

introducing the form into a forming die having a desired cross sectional shape to produce a reshaped form; and

20 cutting the reshaped form into a desired length.

33. The method of claim 32 wherein the reshaped form is shaped so as to be useful as a fence component or as a decking component.

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FIGURES
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